

REMARKS

Applicants have amended the abstract in response to the Examiner's objection. Applicants have also amended the title to specify that the electrochemical cell is a lithium electrochemical cell.

Applicants amended claims 2, 18, 28, 32, 40, and 46, and cancelled claims 6-7, 13, 25-27, 36-38, and 44. Claims 1-5, 8-12, 14-24, 28, 31-35, 39-43, and 45-46 are pending.

Claims 1-4, 8-14, 17-25, 31-36, and 39-46 were rejected under 35 U.S.C. § 102(e) as being anticipated by Bowles et al., 2005/0191545 ("Bowles"). Claims 1-6, 8-14, 31-36, and 39-46 were rejected under 35 U.S.C. § 102(e) as being anticipated by Otterstedt et al., 2004/0053138 ("Otterstedt"). Claims 6, 13, 25, 36, and 44 were cancelled, so the rejection of these claims should be withdrawn. Applicants request that the rejection of claims 1-5, 8-12, 14, 17-24, 31-35, 39-43, and 45-46 be reconsidered and withdrawn for the following reasons.

A reference qualifies as prior art under 35 U.S.C. § 102(e) only if the application has a filing date that predates the date on which an invention covered by a particular claim was made. Specifically, 35 U.S.C. § 102(e) provides, in relevant part:

A person shall be entitled to a patent unless-

(e) the invention was described in - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent....

The present application was filed on March 15, 2004. Bowles was filed on February 26, 2004, and Otterstedt was filed on September 12, 2003. A declaration of Dana Alexa Totir, Kirakodu S. Nanjundaswamy and Michael Pozin under 37 C.F.R. § 1.131, submitted with this amendment, establishes that electrical chemical cells covered by claims 1-5, 8-12, 14-24, 28, 31-35, 39-43, and 45-46 were made and used by applicants prior to September 12, 2003. For the convenience of the Examiner, paragraph 3 of the Declaration is quoted below:

3. The laboratory notebook pages demonstrate that electrochemical cells covered by claims 1-5, 8-12, 14-24, 28, 31-35, and 39-43, and 45-46 were made and used prior to September 12, 2003.

(a) Some of the information on the notebook pages is highlighted for convenience. See in particular the highlighted information next to "Cell #1" on page 2489-110 and "Cell #2" on page 2489-111. The electrochemical cells were coin cell models that included a plastic housing, a cathode including " β -EMD" (β -electrolytic manganese dioxide) on a "primed Al" (aluminum) current collector. The aluminum current collector in turn was pressed on an "SS grid". SS is stainless steel, and the aluminum current collector thus was in contact with a second metal surface (the stainless steel) different from the surface of the aluminum current collector. The cells included a "Li" (lithium) anode and an electrolyte including "0.05 M" (page 2489-110) or "0.03 M" (page 2489-111) LiBOB." LiBOB is lithium bis(oxalato)borate. Thus, the electrochemical cells described on laboratory notebook pages 2489-110 and 2489-111 include all of the requirements of claims 1-2, 5, 8-12, 31-35, and 45-46.

(b) Laboratory notebook pages 2489-110 and 2489-111 refer to "LiBOB in TDE10" in the highlighted information next to "Cell #1" and "Cell #2". TDE10 is an internal name for an electrolyte that includes, among other ingredients, lithium trifluoromethanesulfonate. Thus, electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 also include all of the requirements of claims 3 and 4.

(c) The aluminum cathode current collector used in the electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 had a size of at least one dimension greater than 2 millimeters. Thus, the electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 include all of the requirements of claims 14-16.

(d) The electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 were designed to be discharged once and then discarded, and thus are primary electrochemical cells as opposed to secondary (rechargeable) electrochemical cells. Thus, the electrochemical cells on laboratory notebook pages 2489-110 and 2489-111 meet all of the requirements of claims 17-24, 28, and 39-43.

Thus, the invention (the electrochemical cells) covered by claims 1-5, 8-12, 14-24, 28, 31-35, 39-43, and 45-46 were made prior to the filing dates of Bowles and Otterstedt. As a result, Bowles and Otterstedt do not qualify as prior art to those claims under 35 U.S.C. § 102(e).

Thus, the 35 U.S.C. § 102(e) rejections of claims 1-5, 8-12, 14, 17-24, 31-35, 39-43, and 45-46 based on Bowles and Otterstedt should be withdrawn.

Claims 9-13, 21-25, and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowles and/or Otterstedt and further in view of Amine et al., 2005/0019670 ("Amine"). Claims 13 and 25 were cancelled, so the rejection of these claims should be withdrawn. Bowles and Otterstedt do not qualify as prior art to claims 9-12, 21-24, and 28 for the reasons explained above. These claims have not been rejected based on Amine alone. Thus, the 35 U.S.C. § 103(a) rejection of claims 9-12, 21-24, and 28 based on Bowles and/or Otterstedt and further in view of Amine should be withdrawn.

Claims 5-7 and 26-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowles and/or Otterstedt and further in view of Boczer et al., 2006/0216597 ("Boczer"). Claims 6-7 and 26-27 were cancelled, so the rejection of these claims should be withdrawn. Bowles and Otterstedt do not qualify as prior art to claim 5 for the reasons explained above. In addition, Boczer potentially qualifies as prior art only under 35 U.S.C. § 102(e), but Boczer was owned by the same company as the present application at the time the invention covered by the claims in the present application were made. Therefore, under 35 U.S.C. § 103(c), Boczer does not qualify as prior art to the present application for purposes of 35 U.S.C. § 103(a). Thus, the 35 U.S.C. § 103(a) rejection of claim 5 should be withdrawn.

Claims 31-36 and 39-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowles in view of Amine. Claims 36 and 44 were cancelled, so the rejection of these claims should be withdrawn. Bowles does not qualify as prior art to claims 31-35, 39-43, and 45-46 for the reasons explained above. These claims have not been rejected based on Amine alone. Thus, the 35 U.S.C. § 103(a) rejection of claims 31-35, 39-43, and 45-46 based on Bowles and Amine should be withdrawn.

Claims 31-36 and 39-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Otterstedt in view of Amine. Claims 36 and 44 were cancelled, so the rejection of these claims should be withdrawn. Otterstedt does not qualify as prior art to claims 31-35, 39-43, and 45-46 for the reasons explained above. These claims have not been rejected based on Amine alone. Thus, the 35 U.S.C. § 103(a) rejection of claims 31-35, 39-43, and 45-46 based on Otterstedt and Amine should be withdrawn.

Claims 1-13 and 17-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boczer in view of Amine. Claims 6-7, 13, 25-27, 36-38, and 44 were cancelled and claims 29-30 were withdrawn, so the rejection of these claims should be withdrawn. Boczer does not qualify as prior art to the present application for purposes of 35 U.S.C. § 103(a) for the reasons explained above. Claims 1-5, 8-12, 17-24, 28, 31-35, 39-43, and 45-46 have not been rejected based on Amine alone. Thus, the 35 U.S.C. § 103(a) rejection of these claims based on Boczer and Amine should be withdrawn.

Claims 1-13 and 17-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boczer in view of Wietelmann et al., U.S. 6,506,516 ("Wietelmann"). Claims 6-7, 13, 25-27, 36-38, and 44 were cancelled and claims 29-30 were withdrawn, so the rejection of these claims should be withdrawn. Boczer does not qualify as prior art to the present application for purposes of 35 U.S.C. § 103(a) for the reasons explained above. Claims 1-5, 8-12, 17-24, 28, 31-35, 39-43, and 45-46 have not been rejected based on Wietelmann alone. Thus, the 35 U.S.C. § 103(a) rejection of these claims based on Boczer and Wietelmann should be withdrawn.

Claims 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowles and/or Otterstedt in view of Amine and/or Boczer in view of Wietelmann and Krause et al., U.S. 5,691,081 ("Krause"). Bowles and Otterstedt do not qualify as prior art to these claims for the reasons explained above. Boczer does not qualify as prior art to the present application for purposes of 35 U.S.C. § 103(a) for the reasons explained above. The claims have not been rejected based on Amine, Wietelmann, and/or Krause alone. Thus, the 35 U.S.C. § 103(a) rejection based on the above combinations should be withdrawn.

Applicants submit that the claims are in condition for allowance and such action is respectfully requested.

Applicant : Dana Alexa Totir et al.
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Please apply the \$1,020 Petition for Extension of Time fee and any other charges to deposit account 06-1050, referencing attorney no. 08935-270001.

Respectfully submitted,

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